



# Beyonics Headquarters, Singapore

Beyonics' headquarters in Singapore is a high-precision, zero-defect manufacturer of mission critical products provides and provide advanced precision engineering solutions for the Healthcare, Automotive and Technology sectors, with vertically-integrated capabilities in tool design & fabrication, plastic injection molding, metal stamping, product assembly and associated value adding processes.







## **Manufacturing Capabilities & Services**

## **Tool Design & Fabrication**

- Advanced software for mold design: Siemens NX, Autodesk Moldflow, Solid Works – 2020, Magma
- High cavitation moulds up to 96 cavities
- Moulds with complex multiple axial movement (5 Axis)
- · Vertical injection moulding
- Hot moulds for high-performance engineering plastics
- Sequential moulding
- · Optimised cooling design with conformal cooling
- · Insert moulding / Over moulding
- Unscrew moulds
- · Aluminium die casting tools

## **Deep Draw Stamping**

- Machine range from 25 tons to 300 tons
- State of art transfer stamping technology Transfer Stamping
- · Highly complex & high precision metal stamping

#### **Box Build Assembly**

 Vertical integrated solution for customer, from mold making, stamping, molding upto box build level

#### **Clean Room Facilities**

- Manufacture Class 3 medical devices
- Bioburden control environment
- · Capability of reagent filling
- Medical parts assembly

## **Plastics Injection Molding**

- Plastics injection machines (15 to 450 tons)
- Over-mold/Insert molding (vertical and horizontal)
- Automated insert molded assembly by using scara robot/ 6 axis robot
- Fully automated assembly process which include pick and place, glue dispensing, vision inspection, tray loading & unloading
- 100% Part inspection

## **Clean Room Molding**

- Class 8, 100K cleanroom molding & assembly
- Machine range from 50 tons to 360 tons
- · FDA audited production site
- Fast cycle injection molding upto 6 sec/cycle

#### **Controlled Environment Molding**

- Machine range from 15 tons to 450 tons
- Machine type range from fully electric, hybrid & hydraulic machine.
- Fully automated molding & inspection process
- High speed Injection upto 500mm/s
- Thin wall molding upto 0.2mm



# **Manufacturing Capabilities & Services**

## **Engineering Services**

- Early design improvements and reviews for sustainable manufacturing
- Real Time, collaborative CAD based design review and improvement
- Full DFM (Design for Manufacturability) review support and VAVE (Value Analysis/Value Engineering)

#### R&D Lab

- CMM machines (Brown & Sharpe, Mitutoyo, and Hexagon)
- Stratasys Objek 30 Prime 3D Printer
- Roland MDX 540 Precision Desktop CNC
- Roughness surface test surface 1500DX
- Working tool box

## Inspection

- CMM
- Spectrometer
- · Surface roughness tester
- · Melt flow index machine
- Impact tester
- Smartscope

## **Industries**



Automotive



**Industrial Automation** 



Technology



Healthcare & Medical

#### Certifications

ISO 9001: 2015 ISO 13485: 2016 ISO 14001: 2015 IATF 16949: 2016 FDA-registered

## **Beyonics Headquarters**

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Beyonics is headquartered in Singapore and provides Advanced Precision Engineering and Manufacturing Solutions for the Healthcare, Automotive and Technology sectors.

Our in-house capabilities, ranging from engineering and design (material & process), tooling, automation, complex and precision components manufacturing (plastics & metals), to end product assembly, enable Beyonics to provide a full suite of services to meet customers' high value and complex manufacturing needs with extensive automation and zero defect test solutions.



